

the

solid heat transfer medium;

wherein said step of transferring heat from the vapor of the fluid heat transfer medium to the solid heat transfer medium comprises directing the fluid heat transfer medium toward the solid heat transfer medium using capillary action; and

wherein said step of transferring heat from the vapor of the fluid heat transfer medium to the solid heat transfer medium further comprises circulating the fluid heat transfer medium along at least one closed loop path located adjacent the solid heat transfer medium.

8. (Amended) Wafer heating apparatus comprising:

a heat source;

a solid heat transfer medium on which a wafer is to be supported; and

a fluid heat transfer medium contained in an enclosed space located between said solid heat transfer medium and said heat source, wherein heating of a liquid component of the fluid medium by heat from said heat source evaporates the fluid heat transfer medium, and resultant vapor of the fluid heat transfer medium is condensed by the transferring of heat to the solid heat transfer medium;

wherein said heat source comprises a heater block having an upper surface facing towards a lower surface of said solid heat transfer medium, and at least one of said upper surface of the heater block and said lower surface of the solid heat transfer medium define a singular groove in a closed loop shape, the fluid heat medium being contained in said singular groove;

cancel
wherein said enclosed space is delimited by said solid heat transfer medium such that the vapor of the fluid heat transfer medium is allowed to contact the solid heat transfer medium directly.

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19. (Amended) The wafer heating apparatus of claim 8, further comprising a tubular body disposed in said singular groove, the fluid heat transfer medium being disposed in said tubular body.

Please cancel claims 2-6, 9-12, 16-18 and 21-23 without prejudice or disclaimer of the underlying subject matter.

Please add the following new claim:

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-- 24. A method of heating a wafer comprising the steps of:
generating from a heat source heat to be supplied to the wafer;
transferring the heat to a liquid component of fluid heat transfer medium in an amount sufficient to evaporate the liquid and thereby produce a vapor;
transferring heat from the vapor of the fluid medium to a solid heat transfer medium, whereby the vapor is condensed back into a liquid phase; and
supporting the wafer on the solid heat transfer medium so that the wafer is heated with the heat which has been transferred from the vapor of the fluid heat transfer medium, and from the heat source by conduction, to the solid heat transfer medium,
wherein the solid heat transfer medium is heated substantially only by radiant